	Application No.	Applicant(s)
Notice of Allowability	10/539,275	HANSEN ET AL.
	Examiner	Art Unit	
	CHARLES E. ANYA	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the response of 08/24/10 and interview of 11/16/10.*

2. ☒ The allowed claim(s) is/are *1, 2, 5, 7-9, 11-16: now renumbered as 1-12.*

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

        a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

            1. ☐ Certified copies of the priority documents have been received.

            2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

            3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *11/16/10* .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/Andy Ho/
Primary Examiner, Art Unit 2194

EXAMINER'S AMENDMENT & REASONS FOR ALLOWANCE

An examiner's amendment to the record appears below. Should the changes

and/or additions be unacceptable to applicant, an amendment may be filed as provided

by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be

submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview

with Mr. Eric J. Franklin (Reg. No. 37,134) on 11/16/10.

I.   **EXAMINER'S AMENDMENT:**

In the claims:

Claim 1;

A method to enable access to a function of a real world object represented as an

Aspect Object in [a] an Industrial Control System, which comprises an Aspect System,

the method comprising:

calling an interface of the Aspect Object in the Industrial Control System, through

the Internet or an intranet, from a web client application in a client device external to the

Control System;

downloading from the Industrial Control System to the client device a first

software object comprising a representation of the Aspect Object and the Aspects

associated with the Aspect Object;

downloading from the Industrial Control System to the client device a second

software object comprising a representation of an Aspect Category and an Aspect Type;

[requesting with the information in the first software component and the second software component a representation of an Aspect System Object;]

downloading the representation of the Aspect System Object to the client device hosting the web client application based on information associated with the first and second software objects and matching an interface type passed as a parameter with an interface type listed in the Aspect Category and the Aspect type, wherein the function of the real world object is enabled for access;

initializing the Aspect Object and the Aspect System Object in the client device;

querying a reference to an interface of the Aspect Object with a web client application in the client device external to the Industrial Control System through the internet or an intranet, wherein the Aspect Object comprises a Composite Object comprising Aspects of the Aspect Object;

carrying out with the web client application a table look-up local to the client device of a reference to the Aspects of the Aspect Object, wherein the Aspects implement a function of the real world device; and

implementing with the client the function of the real world object.

Claim 3 (cancelled)

Claim 4 (cancelled)

Claim 6 (cancelled)

Claim 9;

A [computer program product] <u>non-transitory computer readable medium</u>, comprising:

a [non-transitory computer readable medium; and] <u>computer program product including</u> computer program instructions [recorded on the computer readable medium] which when run on a computer or a processor cause said computer or processor to carry out a method to enable access to a function of a real world object represented as an Aspect Object in [a] <u>an Industrial</u> Control System, which comprises an Aspect System, the method comprising:

calling an interface of the Aspect Object in the <u>Industrial</u> Control System, through the Internet or an intranet, from a web client application in a client device external to the <u>Industrial</u> Control System;

downloading from the <u>Industrial</u> Control System to the client device a first software object comprising a representation of the Aspect Object and the Aspects associated with the Aspect Object;

downloading from the <u>Industrial</u> Control System to the client device a second software object comprising a representation of an Aspect Category and an Aspect Type;

[requesting with the information in the first software component and the second software component a representation of an Aspect System Object];

downloading the representation of the Aspect System Object to the client device hosting the web client application based on information associated with the first and second software objects and matching an interface type passed as a parameter with an interface type listed in the Aspect Category and the Aspect type, wherein the function of the real world object is enabled for access;

initializing the Aspect Object and the Aspect System Object in the client device;

querying a reference to an interface of the Aspect Object with a web client application in the client device external to the Industrial Control System through the internet or an intranet, wherein the Aspect Object comprises a Composite Object comprising Aspects of the Aspect Object;

carrying out with the web client application a table look-up local to the client device of a reference to the Aspects of the Aspect Object, wherein the Aspects implement a function of the real world device: and

implementing with the client the function of the real world object.

Claim 11;

[A] An Industrial Control System for access of a function of a real world object associated as an Aspect of the Aspect Object, the Industrial Control System comprising:

means for handling a call to an interface of the Aspect Object, through the Internet or an intranet, from a web client application in a client device external to the <u>Industrial</u> Control System;

means for downloading to the client device a first software component, which first software component comprises a representation of the Aspect Object and an Aspect associated with the Aspect Object;

means for downloading to the client device a second software component, which second software component comprises a representation of an Aspect Category and an Aspect Type;

<u>[means for requesting with the information in the first software component and the second software component a representation of an Aspect System Object;]</u>

means for downloading an the representation of the Aspect System Object to the client device hosting the web client application <u>based on information associated with the first and second software objects and matching an interface type passed as a parameter with an interface type listed in the Aspect Category and the Aspect type,</u> wherein the function of the real world object is enabled for access;

means for initializing <u>the Aspect Object and</u> the Aspect System Object in the client device;

means for querying a reference to an interface of the Aspect Object with a web client application in the client device external to the <u>Industrial</u> Control System through the internet or an intranet, wherein the Aspect Object comprises a Composite Object comprising Aspects of the Aspect Object;

means for carrying out with the web client application a table look-up local to the

client device of a reference to the Aspects of the Aspect Object, wherein the Aspects

implement a function of the real world device; and

means for implementing with the client the function of the real world object.

Claim 12;

The <u>Industrial</u> Control System according to claim 11, wherein the web client

application is a web browser.

Claim 13;

The <u>Industrial</u> Control System according to claim 12, wherein the <u>Industrial</u>

Control System comprise a web server, which handles the download of the first and

second software component to the client device.

Claim 14;

The <u>Industrial</u> Control System according to claim 11, wherein the function of the

real world object is a start, stop, open or close function.

Claim 15;

The <u>Industrial</u> Control System according to claim 11, wherein the client device is a personal computer, a mobile phone, a handheld device or a Personal Digital Assistant.

Claim 16;

A method to enable access to a function of a real world object represented as an Aspect Object in [a] <u>an Industrial</u> Control System, which comprises an Aspect System, the method comprising:

calling an interface of the Aspect Object in the Control System, through the Internet or an intranet, from a web client application in a client device external to the <u>Industrial</u> Control System;

downloading from the <u>Industrial</u> Control System to the client device a first software object comprising a representation of the Aspect Object and Aspects associated with the Aspect Object;

downloading from the <u>Industrial</u> Control System to the client device a second software object comprising a representation of an Aspect Category and an Aspect Type;

[requesting with the information in the first software component and the second software component a representation of an Aspect System Object;]

downloading the representation of the Aspect System Object to the client device hosting the web client application <u>based on information associated with the first and</u>

second software objects and matching an interface type passed as a parameter with an interface type listed in the Aspect Category and the Aspect type, wherein the function of the real world object is enabled for access;

downloading an Aspect System Object, wherein downloading the Aspect System Object comprises matching an interface type with an interface type listed in the Aspect Category and the Aspect Type;

initializing the Aspect Object in the client device;

initializing the Aspect System Object in the client device;

querying a reference to an interface of the Aspect Object with a web client application in the client device external to the Industrial Control System through the internet or an intranet, wherein the Aspect Object comprises a Composite Object comprising Aspects of the Aspect Object;

carrying out with the web client application a table look-up local to the client device of a reference to the Aspects of the Aspect Object, wherein the Aspects implement a function of the real world device; and

implementing with the client the function of the real world object.

II.   REASONS FOR ALLOWANCE:

As to claims 1, 9, 11 and 16, the closest prior art of record, Anderson et al. (WO 01/02953 A1), taken alone or in combination do not specifically disclose or suggest the claimed recitations of "downloading the representation of the Aspect System Object to

the client device hosting the web client application based on information associated with

the first and second software objects and matching an interface type passed as a

parameter with an interface type listed in the Aspect Category and the Aspect type",

when taken in the context of claims as a whole.

Dependent claims 2, 5, 7, 8 and 12-15 are allowed as they depend upon

allowable independent claims

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to CHARLES E. ANYA whose telephone number is

(571)272-3757. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hyung Sough can be reached on 571-272-6799. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cea.

/Andy Ho/
Primary Examiner, Art Unit 2194